

FIG. 1

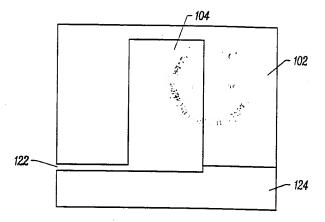


FIG. 2A

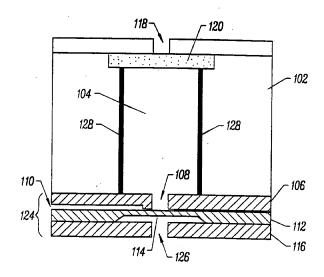


FIG. 2B

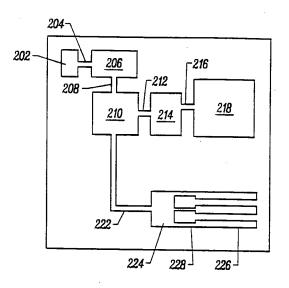
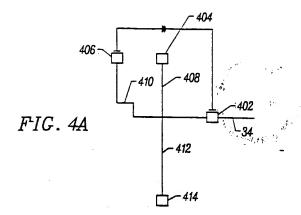
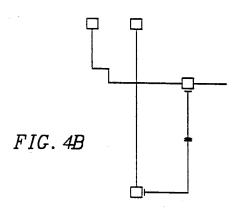
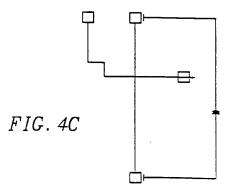


FIG. 3







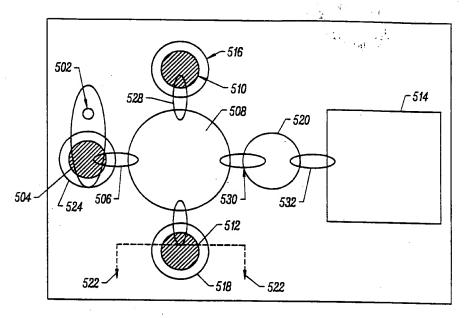


FIG. 5A

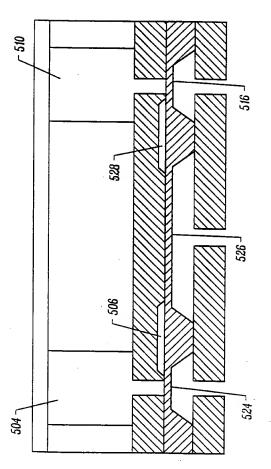
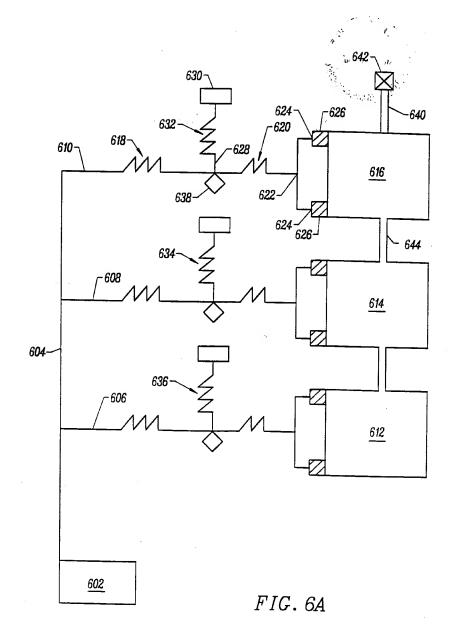
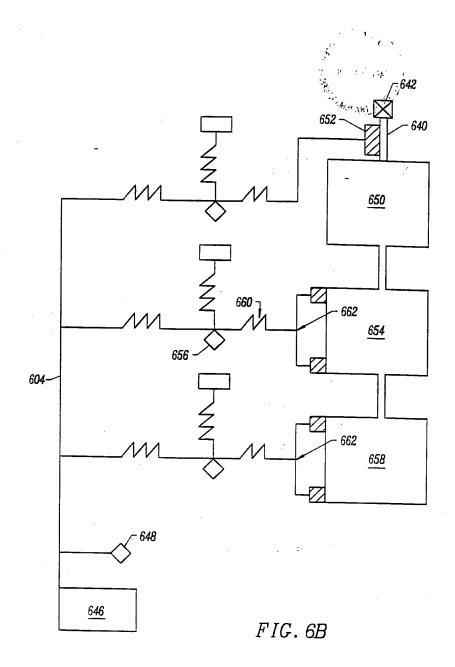


FIG. 5B







Pressure Distribution Among Control Nodes

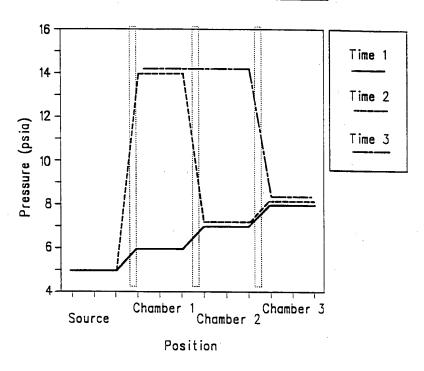


FIG. 6C

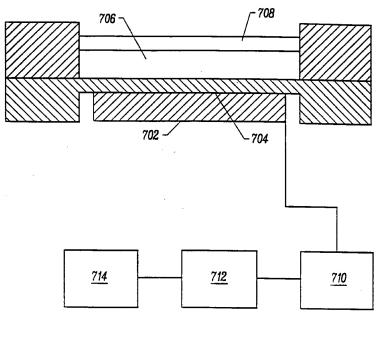
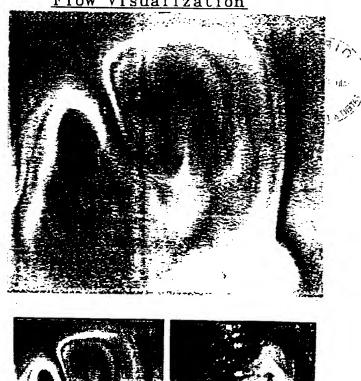


FIG. 7A

Flow Visualization



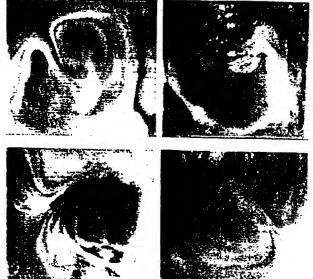


FIG. 7B

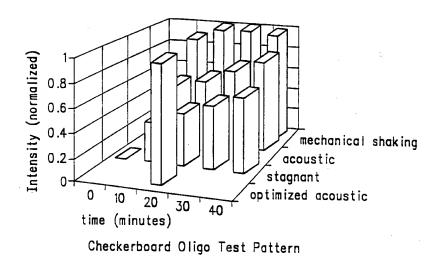
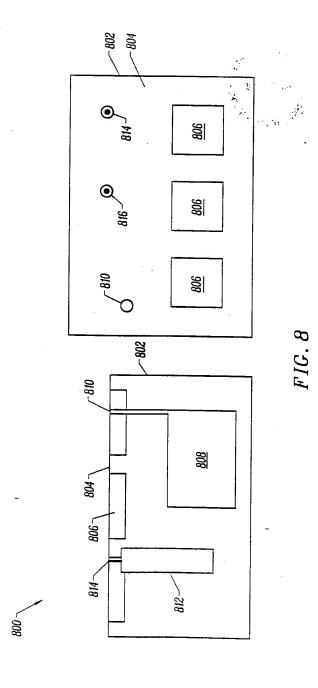
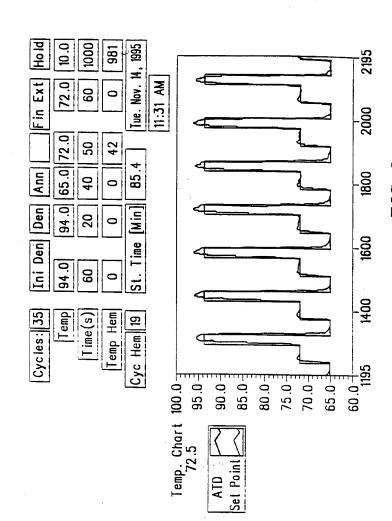


FIG. 7C

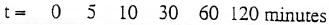


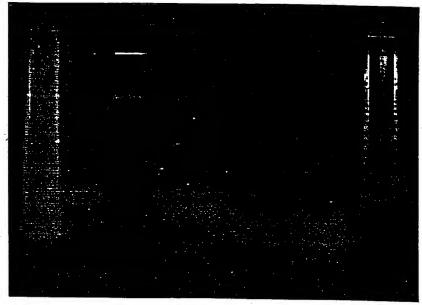


The state of

FIG. 9

Effect of Fragmentation Time at 94C





Correct Call Rates:

FIG. 10A



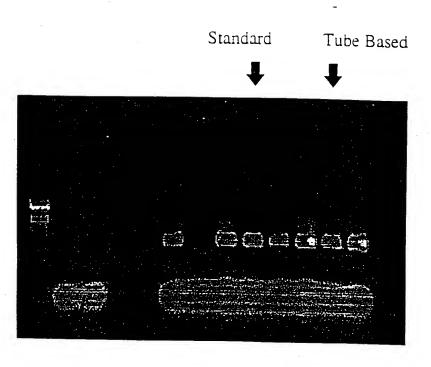


FIG. 10B

PCR Results

■ PCR:

amplification: 109 (35 cycles)

control microchamber

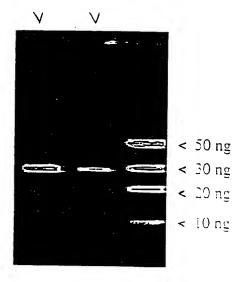


FIG. 10C

1100

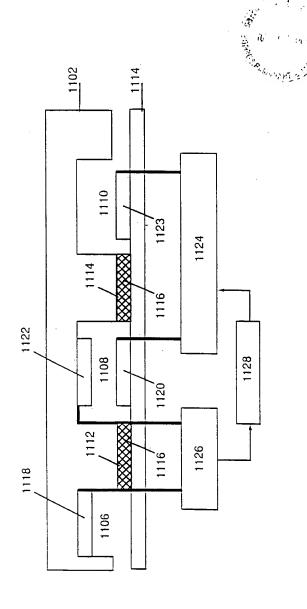


Figure 11

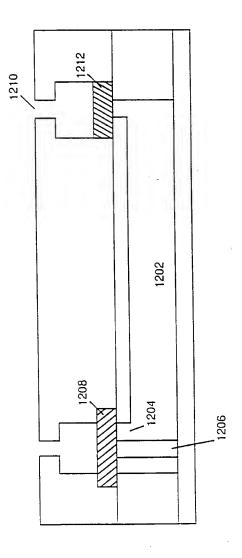


Figure 12a

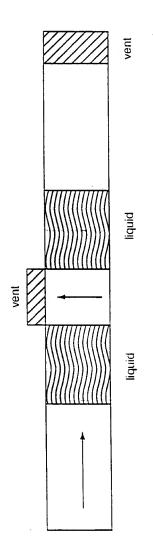


Figure 12b

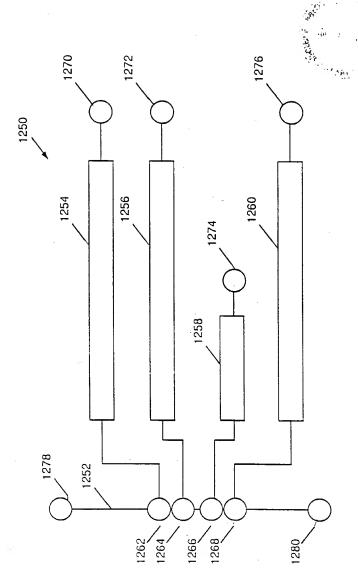


Figure 12c

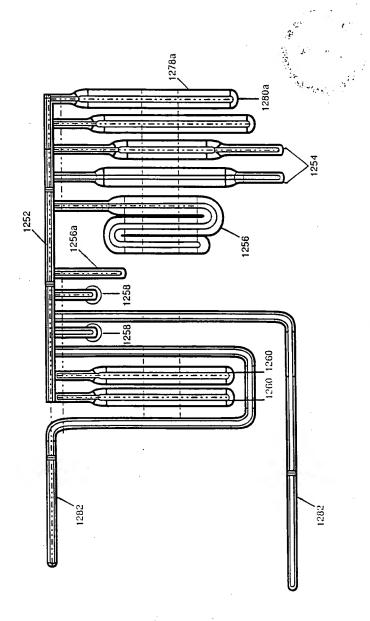


Figure 12d

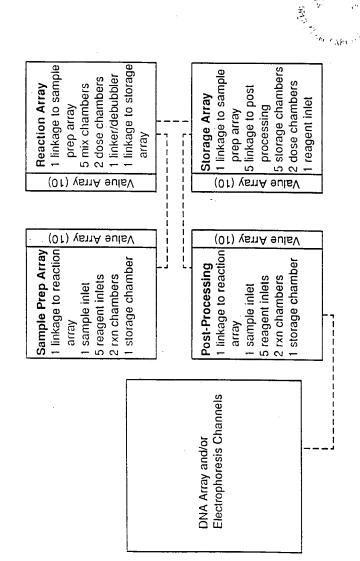


Figure 13

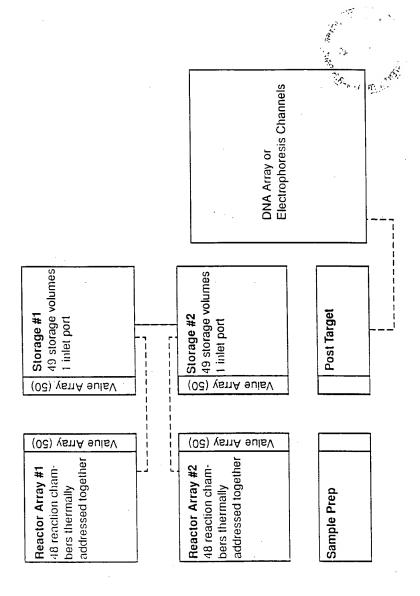
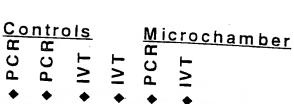


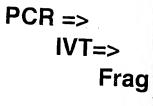
Figure 14



Cold Zone Hot Zone Thermal Configuration PCR Mixture IVT Mixture

Figure 15a







< 50 ng < 30 ng

< 20 ng

< 10 ng

Fig. 15B